

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 10-141383

(43)Date of publication of application : 26.05.1998

(51)Int.Cl.

F16D 3/205

(21)Application number : 08-295469

(71)Applicant : TOYODA MACH WORKS LTD

(22)Date of filing : 07.11.1996

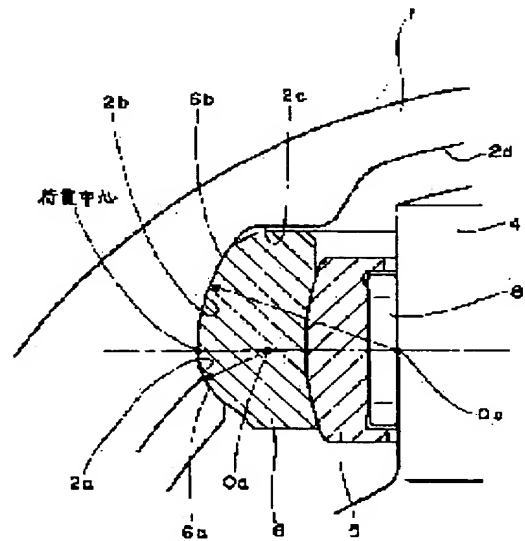
(72)Inventor : YOKOYAMA KENZO  
OKADA MAKOTO  
DOUTOKU KAZUHIRO

## (54) TRIPODAL SYNCHRONIZED JOINT

### (57)Abstract:

**PROBLEM TO BE SOLVED:** To prevent abrasion and fatigue from occurring by constituting the peripheral surface of an outer roller and the track surface of a guide groove with two planes, forming a distance side from the center of a joint into being larger than the near side, and making up a guide way to regulate any inclination of the outer roller upon adjoining the distant side from the joint center of the track surface.

**SOLUTION:** A peripheral surface of an outer roller 6 is composed of two spherical surfaces, and the first peripheral surface 6a at the lower side and the second peripheral surface 6b at the upper side both are smoothly joined together. In addition, a first track surface 2a and a second track surface 2b at each radius of curvature, and further a guide way 2c in linking with the second track surface 2b are all formed in a guide groove 2 formed in an outer member 1 so as to accord with these peripheral surfaces 6a and 6b of the outer roller 6. In this constitution, any inclination is held down to smallness owing to the radius of curvature being small at the lower side of the outer roller and the upper guide way, and such a fact that a contact stress is centralized and it grows larger in and around the load center by means of the radius of curvature being large at the upper side of the outer roller 6 is also eliminated.



## LEGAL STATUS

[Date of request for examination] 30.03.2001

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number] 3525652

[Date of registration] 27.02.2004

Searching PAC  
[Number of appeal against examiner's decision  
of rejection]

[Date of requesting appeal against examiner's  
decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office